In the Matter of

Application Amendment of Hawaii Pacific Teleport, L.P. to Modify its Fixed Earth Station License To Operate a Gateway Earth Station in the 18.4-19.2 GHz (spaceto-Earth) and 27.5-29.15 GHz (Earth-tospace) Frequency Bands with the Eutelsat E172B Satellite

Call Sign: E150010

) File Nos. SES-MFS-20170721-00787 and SES-AMD-\_\_\_\_\_

## EARTH STATION MODIFICATION APPLICATION AMENDMENT

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Hawaii Pacific Teleport, L.P. ("HPT") hereby amends the modification application for its 9-meter gateway earth station in Kapolei, Hawaii (Call Sign E150010) to communicate with the EUTELSAT 172B satellite (File No. SES-MFS-20170721-00787) with the following additional information relating to certain issues discussed in a teleconference with FCC staff. In addition to the information provided below, an updated FCC Form 312 Schedule S, Engineering Statement and Space Debris Mitigation Plan are submitted herewith.

## I. Additional Coordination Status Information Regarding E172B

HPT has consulted with Eutelsat regarding the current coordination status of the EUTELSAT 172B satellite. Regarding coordination with other Ka-band geostationary satellite networks, Eutelsat has confirmed that is progressing coordination under footnote US334 with the U.S. government satellite located at 170°E.L. and anticipates concluding a coordination agreement in due course.

With respect to non-geostationary satellite systems, the Commission has authorized Iridium (Call Sign S2110) feeder links, O3b (Call Sign S2935) service links and the OneWeb (Call Sign S2963, which has not yet been launched) gateway links in spectrum that overlaps with that proposed for use by HPT. Eutelsat is engaged in discussions with Iridium regarding coordination of overlapping spectrum in the 29.1-29.15 GHz band, and has also commenced discussions with OneWeb to coordinate the use of Ka-band frequencies between the OneWeb system and the entire Eutelsat satellite fleet, including EUTELSAT 172B. In addition, HPT has submitted information regarding the compatibility of its proposed operations with the O3b system.<sup>1</sup>

HPT understands that Eutelsat anticipates that discussions with the foregoing systems will result in coordination agreements that include EUTELSAT 172B access to the requested Kaband spectrum. HPT will submit updated information regarding the coordination status of EUTELSAT 172B as it becomes available.

## **II.** Additional Interference Analysis and Carrier Information

Information regarding a 100 Hz downlink beacon (which supports uplink power control) on the EUTELSAT 172B satellite was inadvertently omitted from the FCC Form 312 Schedule S and associated interference analysis. HPT has attached an updated Schedule S and Engineering Statement that includes reference to the beacon, including in the link budget and interference analysis attachments. In addition, the Engineering Statement includes an expanded discussion of downlink pfd compliance, with reference to the levels calculated in FCC Form 312 Schedule S.<sup>2</sup>

There was also a question as to whether the French ITU filing at 172°E.L. includes all the potential carriers that may be used with the EUTELSAT 172B satellite. HPT understands that the French ITU filing includes a range of representative carriers that create an emission envelope with which the satellite and associated earth stations may operate. HPT further understand that its proposed carriers are within that envelope.

<sup>&</sup>lt;sup>1</sup> See Engineering Statement at Section 15.

<sup>&</sup>lt;sup>2</sup> See id. at Section 12.

## III. Other Issues

A revised OAULr.gxt file is attached correcting erroneous data imbedded into the OAUL.gxt file which was producing incorrect values for the antenna gain roll-off. This seemed to be caused by some commas (,) which were inserted before the gain value. The commas have been deleted and now the gain values plot correctly. The original .gxt file shows gain value as 3.4e38, it should be -20 dB.

Also, attached are (i) revised OAULr.gxt, OAURr.gxt and OADR.gxt files in which the files state the beam name (i.e., OAUL); (ii) revised service beam area diagrams which include the U/L and D/L service beam area, latitude/longitude marking and title blocks; (iii) the revised Engineering Statement correctly reflect that channel G01D is 54 MHz; (iv) the Schedule S and Engineering Statement correctly reflect channel GWBD (the "B" is for beacon); and (v) the attached Space Debris Mitigation Plan is labeled as Attachment D.

Finally, because France (the licensing administration for EUTELSAT 172B's Ka-band payload) is a member of the World Trade Organization, no exhibit on effective competitive opportunities is required. *See* 47 C.F.R. §25.137(a)(2).